

Joint Comments of the Green Power Institute and the California Biomass Energy Alliance on the *Accelerated Renewable Energy Development Report*

CEC Docket Nos. 03-IEP-01, 02-REN-1038, 03-RPS-1078, and 04-DIST-GEN-1

September 7, 2004

Respectfully Submitted by:

Gregory Morris
Green Power Institute
2039 Shattuck Ave., Suite 402
Berkeley, CA 94704
(510) 644-2700

Introduction

The Green Power Institute and the California Biomass Energy Alliance submit these Joint Comments on the *Accelerated Renewable Energy Development Report*, in Docket numbers 03-IEP-01, 02-REN-1038, 03-RPS-1078, and 04-DIST-GEN-1, in connection with the 2004 Integrated Energy Policy Report Update Proceeding. We offer comments on the topics of: status of hydro as an eligible renewable resource, extended RPS goals, current statewide renewable production, use of data on statewide and regional renewable generating potential, and tradable RECs. The joint parties support the goal of accelerated renewables development in California, and the development of efficient market mechanisms to facilitate cost-effective development of the state's renewables. These are complex issues, and it is important to plan and regulate effectively.

Status of Hydro as an RPS-Eligible Resource

There was a good deal of discussion at the August 27, 2004, CEC Hearing on the *Accelerated Renewable Energy Development Report* about the appropriate treatment of hydro within the context of the state's RPS program. At least one speaker sarcastically referred to large hydro as "bad" renewable energy. Such hyperbole only serves to

polarize the parties, and completely misses the point. The fact is that all hydro electricity is renewable. Nobody questions that. The real issue is whether hydro, or what types of hydro, should be deemed eligible in meeting RPS obligations.

The purpose of the RPS program is to increase and maintain the amount of renewable energy generation in the California electricity mix by providing incentives for the development and operations of renewable energy generators. Hydro generating resources, especially large ones, are usually multi-purpose projects (water supply, flood control, recreation, as well as energy) that are publicly owned or subsidized. They don't need incentives from the RPS program, and their development and operations are unlikely to be affected by the RPS program. Moreover, due to large annual fluctuations in hydro output, inclusion of hydro in the RPS program causes major accounting problems.

In appreciation of these issues, the legislature in SB 1078 chose to make only "small" hydro generators, defined as less than 30 MW in size, eligible to count towards compliance with the state's RPS program for the regulated segment of the electric utility industry. The exact size to use as the cutoff point is inevitably arbitrary, and further complicated by several ambiguities in its application (e.g., how to deal with dams and waterways with multiple turbines). In the opinion of the Green Power Institute, SMUD has come up with the best solution, which is to base their twenty-percent compliance on non-hydro resources. In so doing, it is our opinion that SMUD will procure no less amount of hydro over the next decade than they would if they counted it, and they will have to procure more non-hydro renewables than they otherwise would.

Extended RPS Goals

The joint parties applaud the CEC's decision to pursue elevated RPS goals beyond the currently mandated goal of twenty percent within the context of accelerating the initial compliance date to 2010, and extension of the statewide goals to the publicly-owned utility sector. Basing the standard on non-hydro renewables, as discussed above, is one way to extend the goal while simplifying compliance obligations. Important issues remain to be resolved, but the Report provides the proper framework for moving forward in these areas.

Current Statewide Renewable Energy Production

On page 23, the Report presents data that show that in 2002, California's renewable energy generating capacity was approximately 7,000 MW, and renewable energy production nearly 30,000 GWh. In the opinion of the joint parties, both of these numbers are too high. The value for renewable energy production is too high primarily due to a lack of disaggregated data in the Report's main source of information, the CEC's 1983-

2002 California Electricity Generation report, as used in the 2003 *Renewable Resources Development Report*.

In particular, the 1983-2002 California Electricity Generation report has a category called “organic waste,” which is used in the Report to represent biomass, including solid fuel biomass, biogas and MSW. The problem is that the category “organic waste” includes a number of facilities that burn non-biomass organic wastes, such as petroleum coke, as well as non-RPS qualifying MSW facilities. The Report states that the installed capacity of biomass and waste in California in 2002 is 1,321 MW (Figure 2, page 35). The Green Power Institute maintains an extensive database on energy production from all forms of biomass in California. The GPI database shows that the installed operational capacity for solid-fuel biomass in the state in 2002 was 640 MW, plus 240 MW of biogas generators, and 20 MW of qualifying MSW, for a total installed biomass generating capacity of only 900 MW.

The Report further states that biomass energy production in California in 2002 was 6,260 GWh. However, the GPI database shows that the total amount of qualifying biomass energy production (solid fuel biomass, biogas, and the MSW facility in Stanislaus County) was less than 5,400 GWh. Some 900 GWh of the biomass energy included in the Report is actually not RPS qualifying energy at all, but energy generated at facilities that burn 100 percent fossil fuel or non-qualifying MSW. It is our opinion that resolution of this issue would be facilitated by consistent disaggregation of this type of renewable energy into the distinct categories of biomass and biogas in future CEC reports.

The GPI is also concerned about the quality of the data on qualifying small-hydro generation. The source document, *Renewable Resources Development Report*, states: “limited data is available specifically on hydroelectric power that is 30 MW or less.” It is the GPI’s opinion that the jury is still out on just how much of the state’s hydro generation will eventually be certified as RPS-eligible.

Regionally-Differential Generating Goals

The Report presents extensive data about regional renewable energy development potentials in California. As acknowledged in the Report, these data are based on estimates of resource availability, and do not take into account any cost-of-production information. The joint parties caution that these data should be used with considerable care and acknowledgement of the inherent uncertainties in determining differential regional development goals for California. In addition, the need for regionally-differentiated goals is closely coupled to whether and how the state adopts a tradable REC system for compliance, rather than the current system in which the obligated energy providers are required to actually procure the requisite amount of renewable energy, not just certificates (see discussion below).

Tradable RECs

Renewable resources are distributed unequally throughout California. As a result, some utility districts are better endowed with renewable potential than others. It is in everyone's best interest to have the best renewable generating sources be mobilized within the state, without regard to jurisdictional issues. A number of options are available to facilitate this process. With the current rules in place governing RPS compliance for the IOUs, utilities may purchase renewables from outside of their territories and bring it in, if doing so is more cost effective than purchasing from in-territory renewables. An alternative under serious consideration in California is to allow for the separation of renewable energy certificates (RECs) from their underlying energy, and allow for REC trading separate from energy transfers. Other effective alternatives are also possible, although the discussion here is focused on tradable RECs.

The compliance rules in SB 1078 are written around a compliance standard that is based on purchases of renewable energy, not on the acquisition of RECs that may be separated from their energy. The CPUC's June 2003 Decision implementing the RPS program, D.03-06-071, approves only compliance based on renewable energy acquisition (bundled RECs) for the present time, but anticipates that trading markets based on separable RECs may be considered sometime in the future. That time may be sooner rather than later, as the legislature recently passed legislation that would create a trading market for separable RECs. Its fate on the Governor's desk is uncertain.

The choice of whether compliance is based on separable or bundled RECs may not be of great concern to the large public and investor-owned utilities in California. Either way, they will be able to enter into the kinds of long-term contracts that renewables developers need to finance new projects. However, small providers, like local munis, ESPs, irrigation districts, and community aggregators, may not be capable of providing the backing needed to enter into long-term contracts. In addition, some of these providers have low expected future load growth and ample supplies, making it difficult for them to commit to new sources of supply from new renewables. For this segment of the market, separable REC trading offers an opportunity for providers to efficiently achieve RPS compliance.

The greatest danger in allowing the separation of RECs from their underlying energy is that it might lead to gaming, double counting, or other market manipulation. The *Questions for Discussion of the 2004 Accelerated Renewable Energy Development Draft Staff White Paper* lists a series of issues that will have to be addressed in order to develop an effective REC trading system. These issues are much too grand to be addressed effectively in the context of these Comments. It is the hope of the Joint Parties that all of the issues surrounding REC trading will be given serious and thoughtful consideration, and a full record developed, before any decisions are made to move forward.